

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A composition of matter, comprising:
 - a) somatotropin;
 - b) a first bioavailability enhancing constituent (BEC); and,
 - c) optionally, a second BEC;

wherein the first BEC is a non-ionic surfactant; wherein the second BEC is selected from one or a mixture of two or more of the following: one or more non-reducing carbohydrate(s) and one or more oxo-acid salt(s);

wherein the somatotropin and BEC are suspended in a substantially non-aqueous hydrophobic carrier; wherein the somatotropin is present at from about 10% to about 50% by weight of the composition; wherein the first (BEC) is present at from about 0.1% to about 10% by weight of the composition; and,

wherein the composition is fluidly injectable at 25 °C .
2. (Original) A composition of matter, of claim 1, wherein the first BEC surfactant is selected from one or a mixture of two or more of the following: polyoxyethylene fatty acids esters, poloxamers, polyoxyethylene sorbitan fatty acid esters, tocopherol polyethylene glycol succinates, sugar fatty acid esters, polyoxyethylene glycerides, and polyoxyethylene vegetable oils.
3. (Cancelled)
4. (Previously Presented) The composition of matter of either claim 1 or 2, wherein the somatotropin is present as a zinc salt or complex.
5. (Previously Presented) The composition of matter of either claim 1 or 2, wherein the somatotropin is human, equine, bovine, or porcine somatotropin.

6. (Previously Presented) The composition of matter of either claim 1 or 2, wherein the second bioavailability enhancing constituent is a non-reducing carbohydrate selected from one or a mixture of two or more of the following: at least one polyol and at least one carbohydrate ester.
7. (Previously Presented) The composition of matter of claim 6, wherein the second bioavailability enhancing constituent is selected from one or a mixture of two or more of the following: trehalose, sucrose, mannitol, sorbitol, trehalose octaacetate, trehalose dihydrate, sucrose octaacetate, and cellobiose octaacetate.
8. (Original) The composition of matter of claim 7, wherein the first BEC is present at from about 0.1% to about 10%, by weight, of the composition and the second BEC is present at from about 1% to about 20%, by weight, of the composition.
9. (Previously Presented) The composition of matter of claim 8, wherein the somatotropin is bovine somatotropin present at about 10-50%, by weight, of the composition, and wherein the substantially non-aqueous hydrophobic carrier comprises about 95% sesame oil and about 5%, by weight, aluminum monostearate.
10. (Previously Presented) The composition of matter of either claim 1 or 2, wherein the second bioavailability enhancing constituent (BEC) is selected from one or a mixture of two or more oxo-acid salt(s).
11. (Previously Presented) The composition of matter of either claim 10, wherein the second BEC is selected from one or a mixture of two or more of the following: monobasic potassium phosphate, dibasic potassium phosphate, monobasic calcium phosphate, dibasic calcium phosphate, sodium nitrate, and dibasic sodium sulfate.

12. (Original) The composition of matter of claim 11, wherein the first BEC is present at from about 0.1% to about 10%, by weight, of the composition and the second BEC is present at from about 1% to about 15%, by weight, of the composition.
13. (Original) The composition of matter of claim 12, wherein the somatotropin is bovine somatotropin present at about 10-50% and wherein the substantially non-aqueous hydrophobic carrier is comprised of about 95% sesame oil and about 5%, by weight, aluminum monostearate.
14. **(Currently Amended)** A composition of matter, comprising:
 - a) somatotropin,
 - b) a first bioavailability enhancing constituent (BEC), and,
 - c) optionally, a second BEC;

wherein the first BEC comprises one or a mixture of two or more of the following: polyoxyethylene 4 stearate, polyoxyethylene 8 stearate, polyoxyethylene(20) sorbitan monooleate;

wherein the second BEC is selected from one or a mixture of two or more of the following: one or more non-reducing carbohydrate(s) and one or more oxo-acid salt(s);

wherein the somatotropin and BEC are suspended in a substantially non-aqueous hydrophobic carrier; wherein the somatotropin is present at from about 10% to about 50% by weight of the composition; wherein the first (BEC) is present at from about 0.1% to about 10% by weight of the composition; and,

wherein the composition is fluidly injectable at 25 °C.
15. (Original) The composition of claim 14, wherein the first BEC comprises polyethylenoxide 8 stearate (POE8S).
16. (Cancelled)
17. (Previously Presented) The composition of claim 15, further comprising a second BEC, wherein the second BEC selected from one or a mixture of two or more of the following: trehalose, monobasic sodium phosphate, and a mixture of monobasic- and dibasic-sodium

phosphate in about a 6:4 molar ratio.

18. **(Currently Amended)** A method of administering somatotropin to a susceptible animal comprising:

parenterally administering to the animal a biocompatible composition of matter comprising:

- a) a somatotropin, biologically-active in the animal;
- b) a first bioavailability enhancing constituent (BEC); and,
- c) optionally, a second BEC;

wherein the first BEC is selected from a non-ionic surfactant;

wherein the second BEC is selected from one or a mixture of two or more of the following: one or more non-reducing carbohydrate(s) and one or more oxo-acid salt(s);

wherein the somatotropin and BEC are suspended in a substantially non-aqueous hydrophobic carrier; wherein the somatotropin is present at from about 10% to about 50% by weight of the composition; wherein the first (BEC) is present at from about 0.1% to about 10% by weight of the composition; and,

wherein the composition is fluidly injectable at 25 °C.

19. (Previously Presented) The method of 18, wherein the first BEC is selected from one or a mixture of two or more of the following: polyoxyethylene 4 stearate, polyoxyethylene 8 stearate, and polyoxyethylene(20) sorbitan monooleate.

20. (Original) The method of claim 19, wherein the first BEC comprises polyethyleneoxide 8 stearate (POE8S).

21. (Cancelled)

22. (Previously Presented) The composition of claim 20, further comprising a second BEC, wherein the second BEC is selected from one or a mixture of two or more of the following: trehalose, monobasic sodium phosphate, and mixture of monobasic- and dibasic-sodium phosphate in about a 6:4 molar ratio.

- 23.-27. (Cancelled)